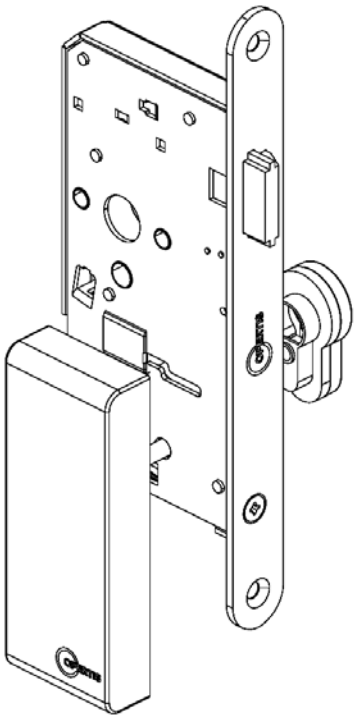


Installation and operating instructions

APS Comfort system for single and two-leaf flush door
ES316.1010E, ES316.1012E

Contents

1 Introduction 4
About these instructions 4
Explanation of the symbols and signal words used 4
Target group 4
OPERTIS Support 4
Up-to-date information 5
2 Product Description 6
Component parts 6
Operating principle 7
Variants of the APS Flush Door Comfort system 8
Signalling 8
Detailed Information 8
3 Intended Use 9
Area of use 9
Condition of the product 9
Ambient conditions 9
Power supply 9
Residual Risk 9
4 Safety Instructions 10
5 Scope of supply 14
6 Installation 16
Overview 16
Installation Tools Required 17
Preparing the door 18
Fitting the lock 18
Functional test 23
7 Operation and Control 25
Programming Terminals and Transponders 25
Replacing the battery 25
Optical and acoustic signals 26
8 Maintenance, Cleaning and Care 27
Intervals 27
Cleaning and Care 27
Maintenance 28
9 Dismantling 30
10 Problems and Solutions 32
11 Product Specification 34
DIN requirements 34

Declaration of Conformity 34
Specification in accordance with CPR 35
Dimensions 36
Rating plate 37
Note on the Operating System 37
Technical data 38
12 Disposal 39
Product 39
Batteries 39
Product packaging 39
Notes: 39

1 Introduction

About these instructions

These instructions contain important information and instructions on installation and operation of the eLOCK eXpress APS Comfort systems for single and double-leaf flush doors, named the APS VB Comfort system in the following.

- Read through the instructions carefully before starting the installation work and putting into service.
- Keep the instructions in a safe place and pass them on to each subsequent owner/user of the APS VB Comfort system.
- Read and follow the enclosed instructions issued by GU-BKS.

Explanation of the symbols and signal words used

⚠ WARNING	Indicates hazards which could result in severe or fatal injuries.
⚠ CAUTION	Indicates hazards which could result in minor or moderate injuries.
CAUTION	Indicates hazards which could result in damage to property.
Note	Indicates information and tips for optimum use of the instructions and the product.

Target group

Faultless and safe function of the APS VB Comfort system largely depends on its proper installation.

These instructions are therefore directed at competent personnel, who have completed suitable training or have experience appropriate for installation, maintenance, care, disposal and maintenance of APS VB Comfort systems or comparable products.

OPERTIS Support

If you have any questions which are not answered by the information provided in these instructions, please contact

OPERTIS GmbH
Prof.-Bier-Straße 1-5
D-34454 Bad Arolsen

Tel.: +49 5691 87741-200
Fax: +49 5691 87741-281
Email: support@opertis.de

Up-to-date information

All details of the product, images, dimensions and versions are correct at the time of delivery of the product. We reserve the right to make changes in line with technical progress and the resulting continuous improvement process of our products.

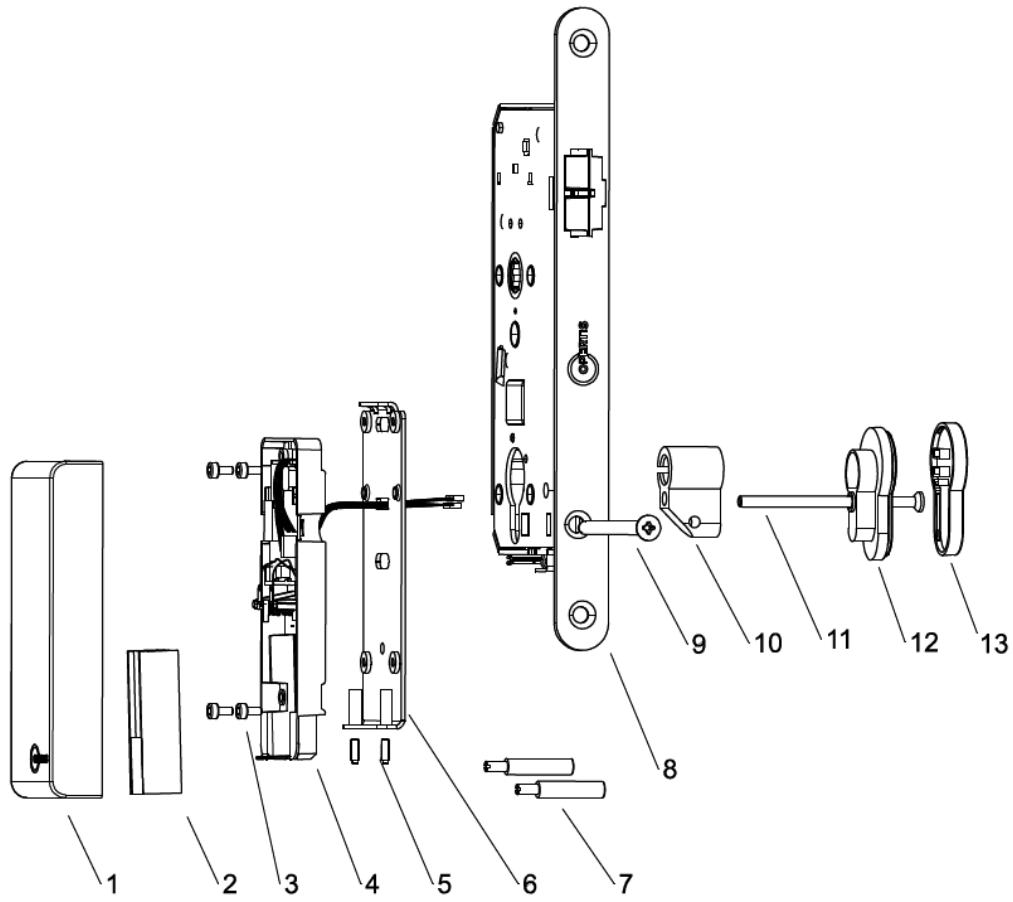
The current version of these instructions and further information is also available on our internet site www.opertis.de.

Dated 11/2014

2 Product Description

Component parts

The following drawing shows the component parts of the APS VB Comfort system:



1	Stainless steel cap
2	Battery
3	M3x6 screws
4	Electronic module with antenna cables
5	M3x9 setscrews, screwed into the mounting plate
6	Mounting plate
7	M4xM4 and M4xM5 screw-in cams
8	APS lock
9	Forend screw M5x80
10	Profile cylinder adapter
11	Countersunk screw M4, dependent on door thickness
12	Profile cylinder casing
13	Profile cylinder cover with antenna

Operating principle

Self-locking motor panic lock with integrated electronics in accordance with DIN 18251-1.

The OPERTIS eLOCK eXpress locking system ensures continuous, consistent fitout of a building. Special terminal devices (terminals) are available for different door types.

The APS VB Comfort system includes a self-locking lock, which locks automatically when the door is closed. There is no locking in the conventional sense, with a knob or key; mechanical locking is no longer necessary.

With the APS VB Comfort system the inside door lever handle is always coupled. Thanks to the integrated anti-panic function when the inside door lever handle is pressed the latch and release lever are drawn back; the door can always be opened from the inside. The panic function cannot be switched off.

With the APS VB Comfort system the outside door lever handle has no function in the uncoupled state. It can be pressed, but has no connection with the latch and release lever. In this state the door cannot be opened using the outside door lever handle. The access organisation is implemented by short-term coupling of the otherwise empty running outside door lever handle after holding an authorised transponder in front of the antenna. When the coupled outside door lever handle is pressed the latch and release lever are pulled back.

There is no unlocking in the conventional sense with a knob or key; mechanical unlocking is no longer necessary.

The management and programming, including the issue of access authorisations, is carried out using the eLOCK eXpress management software.

Various types of passive transponders without their own power supply, such as key fobs, cards and customised types are available for authorisation at the terminals.

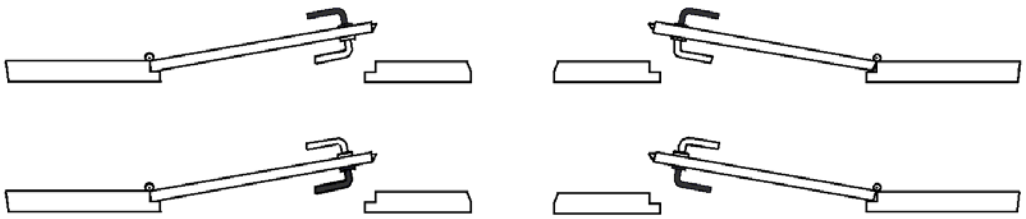
Variants of the APS Flush Door Comfort system

A differentiation is made between the following variants of the APS VB Comfort system:

The APS VB Comfort system is available in 4 different lock variants with 3 backsets (55, 60 and 65 mm) and two forend widths (20 and 24 mm).

Right-hung

Left-hung



Lever handle with panic function

Electrically controllable lever handle

The type of lock depends on the opening direction of the door and the lever handle side to be electrically controlled or rather the panic side. (See figure above)

Note

Strike plate, lever handle, touch-bars and grab bars that fit in the rose shape and are tested for the B2170 lock made by BKS are absolutely necessary for use with this lock.

Hardware approved to EN179 or 1125 must be used on doors in escape routes.

Signalling

The signalling of the terminals depends on the settings in the eLOCK eXpress software. Optical signalling is switched on by default. A buzzer can be switched on optionally for the acoustic signalling.

The additional power consumption for the buzzer reduces the number of locking cycles that can be achieved by battery-operated terminals.

Detailed Information

Further information on the product is given in Section 11 "Product specification".

3 Intended Use

Area of use

The APS VB Comfort system conforms to the installation dimensions for a mortice lock in accordance with DIN 18251-1 and is designed for use on rebated and unrebated interior doors. Use on external doors is only allowed if the electronics are installed in the protected interior. Use on fire doors or outdoors, e.g. in fences, is not allowed.

The lock meets the requirements for doors in escape routes in accordance with EN 179 and 1125. Approved, tested fittings are used.

Condition of the product

APS Comfort systems for flush doors may only be used if they are in faultless technical condition.

Independent modifications and changes to the product are not allowed.

Ambient conditions

Use in particularly difficult environments, e.g. aggressive gases, high humidity, extreme temperatures or very dusty environment is not allowed. If you have any questions, please contact OPERTIS Support.

Power supply

All battery-operated terminals activate optical "battery empty" warnings and controlled failed locking when the battery power in the fitting is drawing to an end. The battery should then be replaced without delay.

In the event of repeated ignoring of the battery empty warning the APS VB Comfort system uncouples the lever handles continuously (Active Power Off). The Active Power Off state is signalled by an optical warning (see Chapter 7 Operation and Control). This state is retained until the battery is replaced or if applicable an external power supply is provided on the outside of the door beforehand.

Residual Risk

If used properly, as intended and in compliance with the maintenance instructions, this product will help to maintain your property security.

However, the following residual risks cannot be excluded:

- There is a risk of being locked out if the electromechanical components fail.
- If the battery is suddenly and completely discharged the APS VB Comfort system does not work. It does not signal any battery warnings and does not switch to the Active Power Off state. The door can only be opened on the outside with an external power supply ES306.1005 or on the inside using the door lever fittings.

4 Safety Instructions

The following safety instructions must be noted and followed before use! OPERTIS does not accept any liability whatsoever for personal injuries or damage to property caused by failure to follow these instructions!

WARNING

Risk of personal injuries due to the battery

Improper handling of the battery can result in health damage.
Note and comply with the following instructions:

- Only use batteries supplied or approved by OPERTIS.
- Do not open, solder or weld the battery.
- Do not throw the battery in a fire.
- Do not recharge the battery.
- Remove the empty battery from the terminal immediately.
- Keep the battery out of reach of children.
- Do not touch a leaked battery without appropriate protection. Do not bring into contact with the eyes or mouth.

WARNING

Risk of personal injuries and damage to property

The products: ES316.1010E and ES316.1012E APS Comfort systems for flush doors are not approved for use in doors in smoke or fire barriers!
Note and follow the standards, guidelines and EU directives.

WARNING

Risk of personal injuries and damage to property

If the door is closed do not allow any stresses to be transferred onto the latch, or at most low stresses. Otherwise increased effort is required to press the coupled lever handle. This can result in irreparable damage to the APS VB Comfort system.
Avoid excessive stresses, e.g. due to incorrect door seals.

WARNING

Risk of personal injuries and damage to property

If the door is installed incorrectly, increased leverage results in the door lever handle, which transfers stresses to the latch. This can result in malfunctions and irreparable damage to the latch or the APS VB Comfort system.
Avoid stresses, e.g. due to incorrect door installation.

CAUTION

Risk of damage to property

Malfunctions can occur if unapproved types of battery are used. The terminal then does not signal any battery warnings and does not switch to the secured final state of Active Power Off.

Only use battery types approved by OPERTIS.

CAUTION

Risk of being locked out

Without a properly functioning fitting, the door cannot be opened when the latch drops into the strike plate.

When installing the system or changing batteries keep the door open, or ensure that the door can be opened at any time without use of the fitting.

CAUTION

Risk of personal injuries

The profile cylinder cover of the Comfort system is fitted with an LED which has a very bright light. If the Comfort system is supplied with power and the profile cylinder cover is not fitted, the LED in the profile cylinder cover can dazzle your eyes. Do not look directly into the light of the LED.

CAUTION

Risk of damage to property

Electronic components can be irreparably damaged if touched. Note and follow the regulations and instructions in the EN 61340-5-1 standard

CAUTION

Damage to property due to locked latch

If the release lever is actuated manually the latch mechanism is locked. The door cannot be closed as the locked latch hits the locking plate (strike plate). In this case the lock and locking plate can be irreparably damaged. Before closing the door, hold an authorised transponder at the antenna or press down the lever handle on the inside.

CAUTION

Risk of malfunctions

Malfunctions can occur if the APS VB Comfort system is installed in the immediate vicinity of alternating electromagnetic fields (e.g. transformers, MRI scanners, etc.) and transmission equipment.

Before installing check whether any of the above-mentioned interference factors could affect the function of the APS VB Comfort system.

CAUTION

Unauthorised access

The door can always be opened from the inside using the mechanical anti-panic function. Please bear this in mind, especially if using the terminal on doors where the inside lever handle can be easily accessed from the outside.

CAUTION

Unauthorised access

Use of the APS VB Comfort system is only allowed for lever handles that have a so-called fixed pivot mounting in the rose. This ensures that, apart from the torque required to actuate the lever handle, no other forces are transferred onto the lock follower. Use of different lever handles can cause malfunctioning of the APS VB Comfort system and resulting unauthorised access.

CAUTION

Unauthorised access

In the as-delivered condition the APS VB Comfort system is in construction site mode. Access is possible with any OPERTIS transponder, even if unprogrammed.
Immediately following installation you should program the authorisations to prevent unauthorised access; refer to the eLOCK eXpress Quick Start Guide. Have the date and time reset, if necessary by your eLOCK eXpress trade partner.

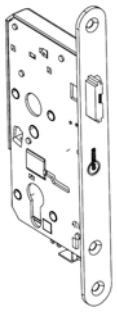
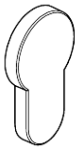
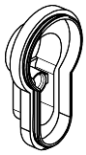
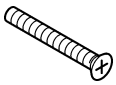
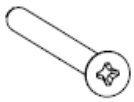
Note

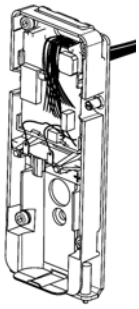
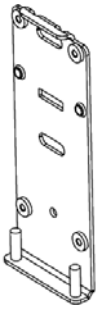
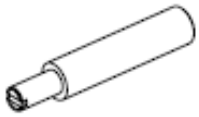
Only use new, unused batteries in the terminal.

- The terminal only exits Active Power Off or battery empty mode if a new battery is inserted.
- If a used battery is inserted in the terminal during normal operation, a premature battery empty warning can occur.

5 Scope of supply

The scope of supply includes the following parts:

Part	Name
	APS lock
	Profile cylinder cover with antenna
	Profile cylinder casing
	Profile cylinder adapter
	1x countersunk screw M4, length dependent on door thickness
	1x forend screw M5x80
	Stainless steel cap
	2x M3x9 setscrews, screwed into the mounting plate

Part	Name
	Electronic module with antenna cables
	4x M3x6 screws
	Mounting plate
	2x M4xM4 and M4xM5 screw-in cams
	Battery

6 Installation

Overview

The installation is divided into the following activities:

- Preparing the door
- Fitting the lock
- Functional test

CAUTION

Unauthorised access

In the as-delivered condition the APS VB Comfort system is in construction site mode. Access is possible with any OPERTIS transponder, even if unprogrammed. Immediately following installation you should program the authorisations to prevent unauthorised access; refer to the eLOCK eXpress Quick Start Guide. Have the date and time reset, if necessary by your eLOCK eXpress trade partner.

CAUTION

Risk of property damage due to incorrect installation

If a lock variant is installed on a door that is hung on the wrong side the door cannot close and the follower can be irreparably damaged. Before installing check whether the correct lock variant (left hung/right hung) is available.

CAUTION

Risk of property damage due to drilling chips

If the drillholes for the lever handles are made when the lock case is already installed, drilling chips can get into the lock and impair or prevent proper functioning of the APS VB Comfort system. Drill all holes before installing the lock case and carefully remove the chips.

CAUTION

Risk of being locked out

Attaching stickers or similar can impair or prevent proper functioning of the APS VB Comfort system. Do not attach any stickers or similar to the lock case.

CAUTION

Risk of being locked out

Installing the APS VB Comfort system in mortices that are too small can impair or prevent proper functioning of the APS VB Comfort system. Mortices must be prepared for mortice locks to DIN 18251-1. When installed, the lock case of the APS VB Comfort system must not touch the sides of the mortice.

Installation Tools Required

You will need the following tools for the installation:

- Suitable screws and screwdrivers for fastening the lock for the respective material and door type.
- A 2mm spanner for fastening the electronic module.
- A screwdriver for the screw fixings of the mounting plate and rose, suitable for the M5 rose screws provided.
- Possibly long nose pliers or a suitable tool for gripping the cable.
- A slot-head screwdriver 0.3 x 1.8 mm for the screw fixing of the stainless steel cap.

Preparing the door

CAUTION

Install suitable locking plate!

The latch recess in the locking plate (strike plate) must be at least 20 mm deep. If not the latch and the locking plate can be damaged and the self-locking function of the lock will not work.

Note

The following two installation steps are only necessary if the door is being fitted with the APS VB Comfort system for the first time.
The door must be prepared for a profile cylinder hole for a standard mortice lock to DIN 18251-1.

Proceed as follows:

Step	Activity	Figure
1	Drill the holes for the profile cylinder hole, square spindle and lever handle, see separate installation instructions for the lever handle.	
2	Deburr the holes and remove any chips carefully.	

Fitting the lock

CAUTION

Do not allow any chips to get into the lock!

Chips in the lock can impair the function of the lock and result in loss of warranty and guarantee claims!

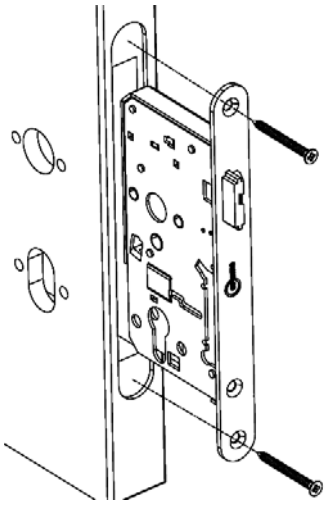
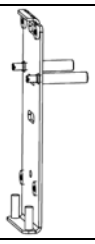
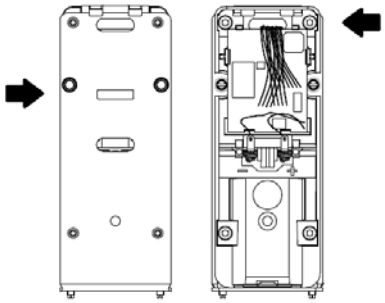
Note

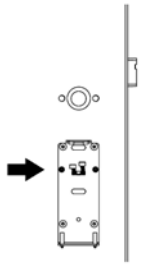
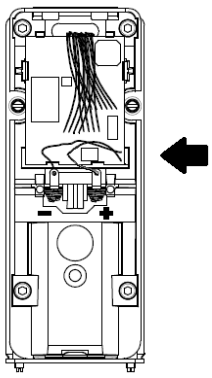
Before installing the APS VB Comfort system any lever handles installed on the door must be dismantled and any existing, mechanical mortice lock must be removed. Provided it is an anti-panic fitting with split, square lever handle spindle size 9 mm, the lever handles can be re-used on the door after the APS VB Comfort system for flush doors has been installed. The mechanical mortice lock is no longer needed.

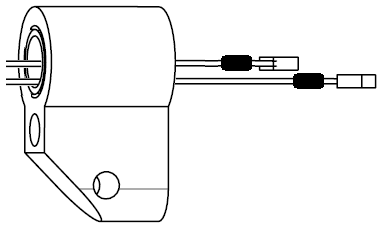
Note

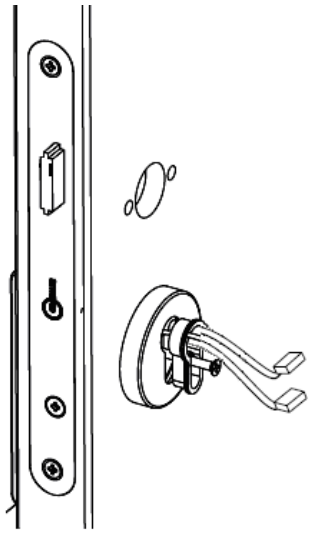
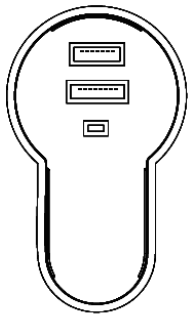
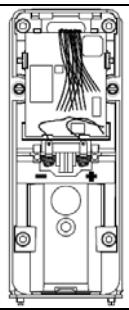
The key rose of the lever handle on the outside of the door must have through holes in it. These must be suitable for metric screws with M4 or M5 thread.

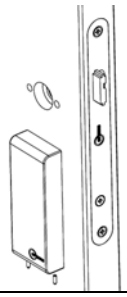
Proceed as follows:

Step	Activity	Figure
3	**CAUTION** **Risk of malfunction and damage to property** Cables protruding from the lock case can be sheared off or become clamped when the lock is installed. Check that the cables are in the lock case and that the profile cylinder holes are covered by the transparent mounting films/masking tape. Push the lock case into the opening in the door leaf and use two suitable screws (not supplied) to fasten it onto the forend.	
4	Pull the motor cable carefully out of the lock towards the inside.	
5	Screw in the screw-in cams, with M4 or M5 internal thread depending on the rose screw fastenings, into the mounting plate from the rear.	
6	**Note:** The motor and antenna cable must always be laid through the middle opening in the mounting plate and through the top opening in the electronic module.	

Step	Activity	Figure
7	**Inside:** Feed the motor cable carefully through the middle opening of the three openings in the mounting plate. Attach the mounting plate with the screw-in cams on the inside of the door at the level of the escutcheon.	
8	**Outside:** Use the cams to screw the rose onto the mounting plate.	
9	**Inside:** Lay the antenna cable of the electronic module through the middle opening of the three openings in the mounting plate, through the profile cylinder opening to the outside, and pull out the cable carefully at the outside of the door.	
10	Feed the motor cable through the top opening of the electronic module. Connect the motor cable to the two-pin connector of the printed board.	
11	Use 4 screws size M3x6 to screw the electronic module onto the mounting plate.	
12	As an installation aid, screw the countersunk screw (whose length depends on the door thickness), into the small thread below the cable routing in the profile cylinder adapter, by a few turns.	

Step	Activity	Figure
13	**Outside:** To ensure that the profile cylinder adapter fits into the lock easily, push the heat-shrinkable sleeves of the antenna cables carefully until they are just in front of the respective connector.	
14	**Outside:** Insert the antenna cable into the lengthwise slot of the profile cylinder adapter. The slanted face of the profile cylinder adapter must point towards the inside of the door.	
15	**Caution** **Risk of damage to property** When inserting the profile cylinder adapter into the lock, ensure that the motor cable is laid below the slanted face of the profile cylinder adapter. Ensure that the antenna cable is not crushed or clamped. There is a risk of the motor or antenna cable being sheared off. Push the profile cylinder adapter together with the antenna cable carefully into the lock from the outside.	
16	Use the M5x80 forend screw to fasten the profile cylinder adapter and remove the installation aid.	
17	Guide the antenna cable through the rose cap and fix it onto the rose. (Refer to the manufacturer's installation instructions)	

Step	Activity	Figure
18	**CAUTION** **Risk of malfunction and damage to property** The cables must not be crushed or clamped when screwing on the profile cylinder casing. Screw in the countersunk screw carefully and pay attention to the cable routing. Feed the antenna cable through the plastic profile cylinder casing. Then screw the profile cylinder casing hand-tight onto the profile cylinder adapter using an M4 countersunk screw, the length of which depends on the thickness of the door.	
19	Plug the seven-pin (marked in red) antenna connector onto the top slot of the antenna. Plug the eight-pin antenna connector onto the middle slot of the antenna. Push the remaining cable back into the profile cylinder hole.	
20	Position the top of the profile cylinder cover on the profile cylinder casing and latch into position at the bottom end.	
21	**Inside:** Insert a new battery in the battery compartment, making sure that the battery is inserted with the correct polarity (right: positive terminal, left: negative terminal).	
22	Stow the motor and antenna cable above the battery in the electronic module.	
23	Place the stainless steel cap on the top of the mounting plate and hook into place.	

Step	Activity	Figure
24	Attach the stainless steel cap to the bottom of the mounting plate using two M3x9 setscrews. To do this, unscrew the setscrews from the mounting plate until they protrude into the holes of the stainless steel cap.	
25	**CAUTION** **Risk of malfunction and damage to property** If the lever handles have through-screw fittings, tightening the screws too tight can exert pressure on the APS VB Comfort system. Do not screw the screws too tight. Install the lever handles according to the manufacturer's instructions.	

Functional test

CAUTION

Risk of being locked in or out

Without a properly functioning terminal, the door cannot be opened if the latch drops into the strike plate.

Carry out functional checks while the door is open.

Note

For correct functioning of the APS VB Comfort system it is absolutely necessary for the lever handle to be able to return to the end stop in the horizontal direction and for the latch to extend out of the lock fully. If the lever handle is pressed or is hanging down slightly (e.g. because installed incorrectly), switching actions are not carried out until after the lever handle has been moved once within the horizontal plane. If the latch does not extend fully the lock's self-locking does not work. The restoring forces generated by the APS VB Comfort system are designed for standard lever handles for interior doors in buildings for non-domestic use. If used in combination with particularly heavy door lever handles, additional restraint (spring-assistance) modules must be installed in the lever handles.

Proceed as follows:

Step	Activity	Result
1	Press the outside lever handle.	The outside lever handle is not engaged. The latch is not retracted
2	Hold a programmed or unprogrammed OPERTIS transponder in front of the reading unit, then press the outside lever handle.	The latch is retracted and after pulling back moves back out again automatically.
3	Press the inside lever handle.	
4	Check the self-locking. Press in the release lever.	The latch and the release lever must spring out. The latch and the release lever cannot be pressed in.
5	Check the panic function: With the lock locked, press the inside lever handle.	The latch and the release lever are drawn in by the actuation of the lever handle.
6	Check the panic function: With the lock locked, press coupled outside lever handle.	
7	**CAUTION** **Risk of being locked out** When closing the door from the outside you must have a transponder in order to re-open the door! Close the door from the inside.	The lock bolt must spring out.

7 Operation and Control

Programming Terminals and Transponders

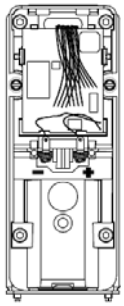
Terminals and transponders are programmed using the eLOCK eXpress management software.

Replacing the battery

Note

Note the details of the battery type given in the "Technical Data" section.

Proceed as follows:

Step	Activity	Figure
1	Screw the M3x9 setscrews into the mounting plate and remove the stainless steel cap.	
2	Remove the battery.	
3	Insert a new battery in the battery compartment, making sure that the battery is inserted with the correct polarity (right: positive terminal, left: negative terminal).	
4	Place the stainless steel cap on the top of the mounting plate and hook into place.	
5	Attach the stainless steel cap to the bottom of the mounting plate using two M3x9 setscrews.	
6	Reset the date and time. Perform a closing action by holding an authorised transponder in front of the antenna.	

Optical and acoustic signals

Note

The signalling of the terminals depends on the settings in the eLOCK eXpress software. Optical signalling is switched on by default. A buzzer can be switched on optionally for the acoustic signalling.

All optical and acoustic signals are given in the eLOCK eXpress system documentation.

In certain system states and events the Comfort systems emit acoustic and/or optical signals:

Optical signal	Meaning
2x short blue-blue 1x short green	Programming with the ToDo card completed successfully.
2x short blue-blue 2x short red-red	Programming with the ToDo card not completed successfully.
2x short blue-blue 1x short red	No programming job with the ToDo card exists for the terminal
repeated short blue	Programming in progress with the NFC stick.
2x short green-blue	Use of the security card
2x short green-green	Switching on of fitting by an authorised transponder.
2x short red-red	No switching on of fitting, transponder is not authorised.
2x short red-green	Switching on of fitting in construction site mode
3x short blue-yellow	Batteries empty, warning level 1 with controlled failed locking
3x short blue-yellow 1x short yellow	Active Power Off, batteries completely discharged
1x long green 1x short blue-red	Battery change or reset performed successfully.
2x short red-red 4x long yellow	System error, contact sales partner
continuous short yellow	The fire service transponder has been used.

8 Maintenance, Cleaning and Care

Maintenance and cleaning may only be carried out by qualified personnel.

We do not provide any warranty whatsoever for damage caused by improper handling.

Intervals

Activity	Interval
Cleaning and maintenance	3 months
Maintenance	1 year

Cleaning and Care

CAUTION

Material damage due to incorrect cleaning

Incorrect cleaning can cause attack and damage to the surfaces:

- Clean and maintain the APS VB Comfort system from the outside only (do not remove the cover caps!).
- Do not use alkali, acidic or chlorine-containing cleaning agents.
- Do not use cleaning agents containing abrasive additives.
- Do not use abrasive instruments, e.g. brushes.
- Do not let any oil or grease to get inside the electromechanical lock.
- Do not let any cleaning agents to get inside the lock case.

Proceed as follows:

Step	Activity	Figure
1	Wipe down the surfaces with a damp cloth.	
2	Lightly grease the slanted face of the extended latch.	

Maintenance

CAUTION

Risk of being locked in or out

Without a properly functioning fitting, the door cannot be opened when the latch drops into the strike plate.

Carry out functional checks while the door is open.

The following functional tests are to be performed at least once a year, if necessary by the eLOCK eXpress trade partner:

Step	Activity	Result
1	Check for secure fit of the lock, the installed fittings and the screws.	All components of the APS VB Comfort system are permanently installed. The latch and the release lever move smoothly and easily.
2	Press the outside lever handle.	The outside lever handle is not engaged. The latch is not retracted
3	Hold an authorised OPERTIS transponder in front of the reading unit, then press the outside lever handle.	The latch is retracted and after pulling back moves back out again automatically.
4	Press the inside lever handle.	
5	Check the self-locking. Press in the release lever.	The latch and the release lever must spring out. The latch and the release lever cannot be pressed in.
6	Check the panic function: With the lock locked, press the inside lever handle.	The latch and the release lever are drawn in by the actuation of the lever handle.
7	Check the panic function: With the lock locked, press coupled outside lever handle.	

Step	Activity	Result
8	**CAUTION** **Risk of being locked out** When closing the door from the outside you must have an authorised transponder in order to re-open the door! Close the door from the inside.	The lock bolt must spring out.
9	Press the inside lever handle or the coupled outside lever handle.	The latch and release lever are retracted: the bolt must not rub against the locking plate.
10	Reset the date and time.	

9 Dismantling

Note

Dismantle in the reverse order.

→ Refer to the figures in Section 6 "Installation".

Proceed as follows:

Step	Activity	Figure
1	Dismantle the lever handles, see separate instructions.	
2	**Inside:** Screw in the M3x9 setscrews at the underside of the cap and remove the stainless steel cap.	
3	Remove battery.	
4	Disconnect the plug-in connection from the motor cable.	
5	**Outside:** Position a small slot-head screwdriver on the bottom edge of the profile cylinder cover, remove the profile cylinder cover and undo the antenna connector.	
6	Undo the screw fixing of the profile cylinder casing and pull it out carefully.	
7	Remove the rose cap.	
8	Screw the countersunk screw into the profile cylinder adapter.	
9	Undo the forend screw and pull the profile cylinder adapter carefully out of the lock, without damaging the antenna cable.	

Step	Activity	Figure
10	**Inside:** Undo 4 screws M3x6 and remove the electronic module carefully, without damaging the motor and the antenna cable.	
11	**Outside:** Undo the screw fixing of the cams. Remove rose.	
12	**Inside:** Remove the mounting plate carefully, without damaging the motor cable.	
13	Stow the motor cable in the lock. Undo the retaining screws of the lock and pull the lock case carefully out of the door leaf.	

10 Problems and Solutions

Problem	Possible cause	Solution
The APS VB Comfort system does not open or close.	The transponder is not a transponder for the locking system	Use the locking system transponder.
	Transponder is defective.	Replace transponder
	Transponder is not programmed or does not have the necessary authorisations.	Program the transponder; see eLOCK eXpress Quick Start Guide.
	APS VB Comfort system has the wrong date or wrong time.	Reset the date and time.
	Battery is empty or defective.	Change the battery, reset the date and time, and operate the APS VB Comfort system once using a transponder.
		Connect an external power supply to the outside of the APS VB Comfort system. Then change the battery, reset the date and time, and use a transponder to operate the APS VB Comfort system at least once.
	The antenna connector has loosened or detached itself.	Plug in the antenna connector fully.
	Antenna is defective.	Replace the antenna.
	Cables are crushed, clamped or torn off.	Replace the APS VB Comfort system.
	There are chips or lubricant in the APS VB Comfort system.	

Problem	Possible cause	Solution
The lever handles are not in the horizontal position (APS VB Comfort system is not working properly).	Lever handles installed at an angle or under pressure.	Install the lever handles correctly and check for smooth and easy movement.
	The lever handles are too heavy.	Replace the existing lever handles with lighter ones or use an additional retraining spring.
Each transponder is authorised for the lock.	APS VB Comfort system is not programmed ("construction site mode").	Program the APS VB Comfort system; see eLOCK eXpress Quick Start Guide.
Latch does not engage.	The latch cut-out in the strike plate does not match the latch position of the APS VB Comfort system.	Adjust the latch cut-out in the strike plate so that it matches the latch position of the APS VB Comfort system.
	Door or doorframe is warped.	Adjust door or doorframe or rather the hinges.
The lock does not lock.	The self-locking is defective.	Replace the lock immediately.
The lock bolt is not retracted when the inside lever handle or coupled outside lever handle is pressed.	The panic function is defective.	Replace the lock immediately. **The door must not be closed, as the panic function is no longer available!**
No optical or acoustic signalling at the terminal.	Signalling has been switched off in the eLOCK eXpress software.	Switch on signalling in the eLOCK eXpress software.
Profile cylinder cover with antenna does not stay on the profile cylinder casing.	Profile cylinder casing has been screwed on too tightly.	Screw on profile cylinder casing hand-tight only.

11 Product Specification

DIN requirements

Installation in mortice locks prepared for profile cylinders in accordance with DIN 18251: Locks - Mortice locks - Part 1: Mortice locks for rebated doors

The lock has a regulatory test certificate issued by the MPA Dortmund. It is marked accordingly.

Declaration of Conformity

Konformitätserklärung gemäß dem Gesetz über Funkanlagen und Telekommunikationsendeinrichtungen (FTEG) und der Richtlinie 1999/5/EG (R&TTE)

Declaration of Conformity in accordance with the Radio and Telecommunications Terminal Equipment Act (FTEG) and Directive 1999/5/EC (R&TTE Directive)

Hersteller The manufacturer	OPERTIS GmbH
Anschrift Address	Prof.-Bier-Straße 1-5 34454 Bad Arolsen Deutschland/Germany
erklärt, dass das Produkt declares that the product	ES316.1000 ES316.1010 ES316.1112 ES316.1001 ES316.1011 ES316.1002 ES316.1012 ES316.1003 ES316.1013 ES316.1004 ES316.1014 ES316.1005 ES316.1015
Typ Type	Funkanlage Radio equipment
Verwendungszweck Intended purpose	Identifikation RFID (13,56MHz)
Geräteklasse Equipment class	Class-1

bei bestimmungsgemäßer Verwendung den grundlegenden Anforderungen des § 3 und den übrigen einschlägigen Bestimmungen des FTEG (Artikel 3 der R&TTE) entspricht.
complies with the essential requirements of §3 and the other relevant provisions of the FTEG (Article 3 of the R&TTE Directive), when used for its intended purpose.

Gesundheit und Sicherheit gemäß § 3 (1) 1. (Artikel 3 (1) a))
Health and safety requirements pursuant to § 3 (1) 1. (Article 3(1) a))

angewendete harmonisierte Normen : Harmonised standards applied...	Einhaltung der grundlegenden Anforderungen auf andere Art und Weise (hierzu verwendete Standards/Spezifikationen) Other means of proving conformity with the essential requirements (standards/specifications used).
EN 50364: 2010	

Schutzanforderungen in Bezug auf die elektromagn. Verträglichkeit § 3 (1) 2, (Artikel 3 (1) b)
Protection requirements concerning electromagnetic compatibility § 3(1)(2), (Article 3(1)(b))

angewendete harmonisierte Normen : Harmonised standards applied...	Einhaltung der grundlegenden Anforderungen auf andere Art und Weise (hierzu verwendete Standards/Spezifikationen) Other means of proving conformity with the essential requirements (standards/specifications used).
ETSI EN 301 489-3 v 1.4.1	

Maßnahmen zur effizienten Nutzung des Funkfrequenzspektrums
Measures for the efficient use of the radio frequency spectrum

Luftschnittstelle bei Funkanlagen gemäß § 3(2) (Artikel 3(2))
Air interface of the radio systems pursuant to § 3(2) (Article 3(2))

angewendete harmonisierte Normen : Harmonised standards applied...	Einhaltung der grundlegenden Anforderungen auf andere Art und Weise (hierzu verwendete Standards/Schnittstellenbeschreibungen)... Other means of proving conformity with the essential requirements (standards/interface specifications used)...
ETSI EN 301 330-1 v 1.7.1 ETSI EN 301 330-2 v 1.5.1	

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Fax +49 5691 87741-310
info@opertis.de

Bad Arolsen, 2014-09-11

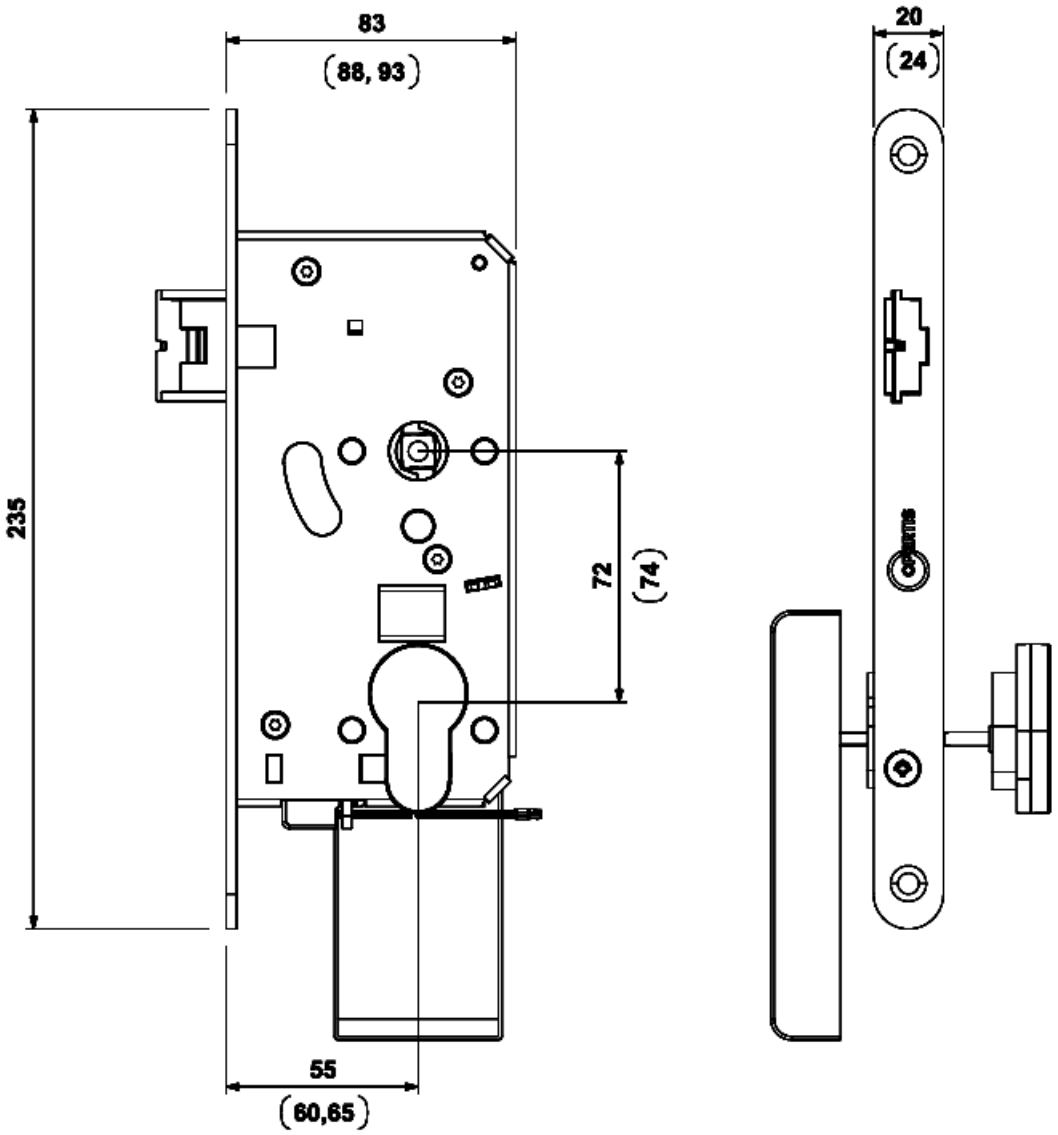
Ort, Datum
Place & date of issue

Specification in accordance with CPR

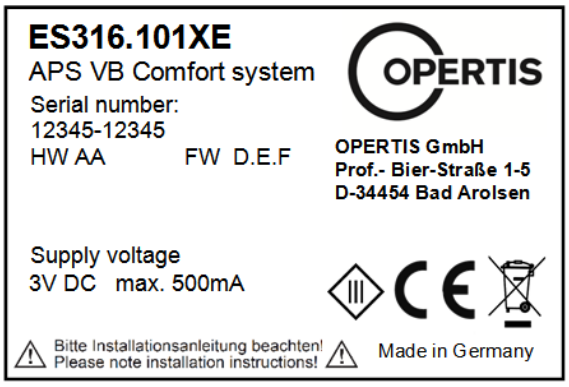
With the uniform EU Construction Product Regulation (CPR), a declaration of performance exists for the APS Comfort system locks. It contains all the important features and performance data of this construction product. It is available as a download from:
www.opertis.de/content/de/service/Software/Bauprodukteverordnung/

Dimensions

All dimensions given in mm.



Rating plate



Note on the Operating System

The APS VB Comfort system is operated with the FreeRTOS operating system. Further information under: www.freertos.org

Technical data

Surface

Forend	Stainless steel
Profile cylinder cover	Polyamide surface
Cover cap	Stainless steel

Power supply

Supply voltage	3 volt lithium battery CR-V3 OPERTIS Art. No.: ES0893
Battery life:	depending on use conditions, choice of signalling and terminal:
○ Ready to use: (with approx. 10 closures per day)	○ up to 3 years
○ Closures (total)	○ up to 70,000 closures
○ Standby time	○ up to 5 years

Specific data

Operating temperature	0 °C to +55 °C
Storage temperature	-20 °C to +60 °C
Humidity for operation and storage	max. 95% non-condensing
Degree of protection: to EN 60529	Outside: IP54 Inside: IP41
Lock strength to DIN 18251 Class 4	Increased burglar resistance and high user frequency
VdS test	The lock is VdS tested and approved.

12 Disposal

Product

Disposal in accordance with WEEE Directive 2012/19/EC:

- Do not dispose of product in the local household waste.
- Send product back to OPERTIS or dispose of it at a communal collection point for hazardous electronic wastes.

Batteries

- Do not dispose of batteries in the local household waste system, but instead at the public battery collection points.
- Do not throw batteries into a fire.
- Do not store used batteries together.
- Only dispose of batteries if they are discharged.

Product packaging

The product packaging must be disposed of through the local household or paper waste collection facility.

Notes:

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